

Docket No. 740756-2431
Application No. 10/066,542
Page 10

REMARKS

The Office Action of January 13, 2006 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Claims 1, 3-6, 8-13, 15-18, 20-23, 25-27 and 41-56 were pending prior to the instant amendment. By this amendment, claims 6, 11, 18, 23, 49 and 53 are amended. As a result, claims 1, 3-6, 8-13, 15-18, 20-23, 25-27 and 41-56 remain pending in the instant application.

With respect to the Office Action, Applicants acknowledge with appreciation the allowance of claims 1, 3-6, 8-13, 15-18, 20-22 and 31-44. Please note that allowed claims 6, 11, and 18 are slightly amended herein, but these amendments should not affect the designation of allowable subject matter.

Claims 23, 25-27, 45-56 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Henley, and claims 23, 25-27, 45-56 are rejected under 35 U.S.C. §103(a) as being unpatentable over Henley in view of Wu '833. These rejection are traversed for the reasons advanced in detail below.

The present invention is directed to a semiconductor device including a semiconductor layer having a crystalline structure on an insulating surface wherein the semiconductor layer includes a source region, a drain region and a channel region. The channel region may contain a rare gas element. Specifically, a second portion in the channel region contains a rare gas element having a concentration gradient and a crystallinity of the first portion in the channel region is higher than that of the second portion in the channel region.


Claims 23, 45, 49 and 53 are amended to recite that "the second portion in the channel region contains a rare gas element having a concentration gradient" and "a crystallinity of the first portion in the channel region is higher than that of the second portion in the channel region". Applicants contend that these features are not disclosed nor suggested in Henley. Therefore, it is believed that the above rejections based on Henley are overcome.

W718197.1

Docket No. 740756-2431
Application No. 10/066,542
Page 11

In view of the foregoing, it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 1, 3-6, 8-13, 15-18, 20-23, 25-27 and 41-56 be allowed and that the application be passed to issue. If a conference would expedite prosecution of the instant application, the Examiner is hereby invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,



Jeffrey L. Costellia
Registration No. 35,483

NIXON PEABODY LLP
Suite 900, 401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000

W718197.1